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ABSTRACT

Vocational training in Hungary consists of 8 years of primary education in the state school system, followed by general secondary schools or secondary or intermediate-level vocational training. Secondary or intermediate-level vocational training is based on three major institutions: vocational secondary schools (4-5 years), skilled workers' schools (3 years), and vocational schools (2-3 years). The most popular and most controversial are the vocational secondary schools, which have undergone several reforms since their establishment in 1961. Access to secondary or intermediate-level vocational training is also given to secondary school leavers. In addition, training courses providing both initial and further training as well as retraining are important in the Hungarian vocational training system. The institutions of higher vocational training in the state school system are the high schools and universities. Problems of the vocational training system include overspecialization, lack of flexibility, lack of computer-based technologies and integration of computers into the curriculum, little relationship of training to changes in the world of work, and too few financial resources. Future developments in the vocational system are expected to revolve around broader training for students, increased financial resources, and increased training courses outside the system. (Resources in this report include sources of information about vocational training in Hungary, lists of major institutions, selected reading and legislation, and 16 data tables.) (KC)

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CEDEFOP Document

New technologies, work organization, qualification, structures and vocational training in Hungary

European Centre for the Development of Vocational Training

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New technologies, work organization, qualification, structures and vocational training in Hungary

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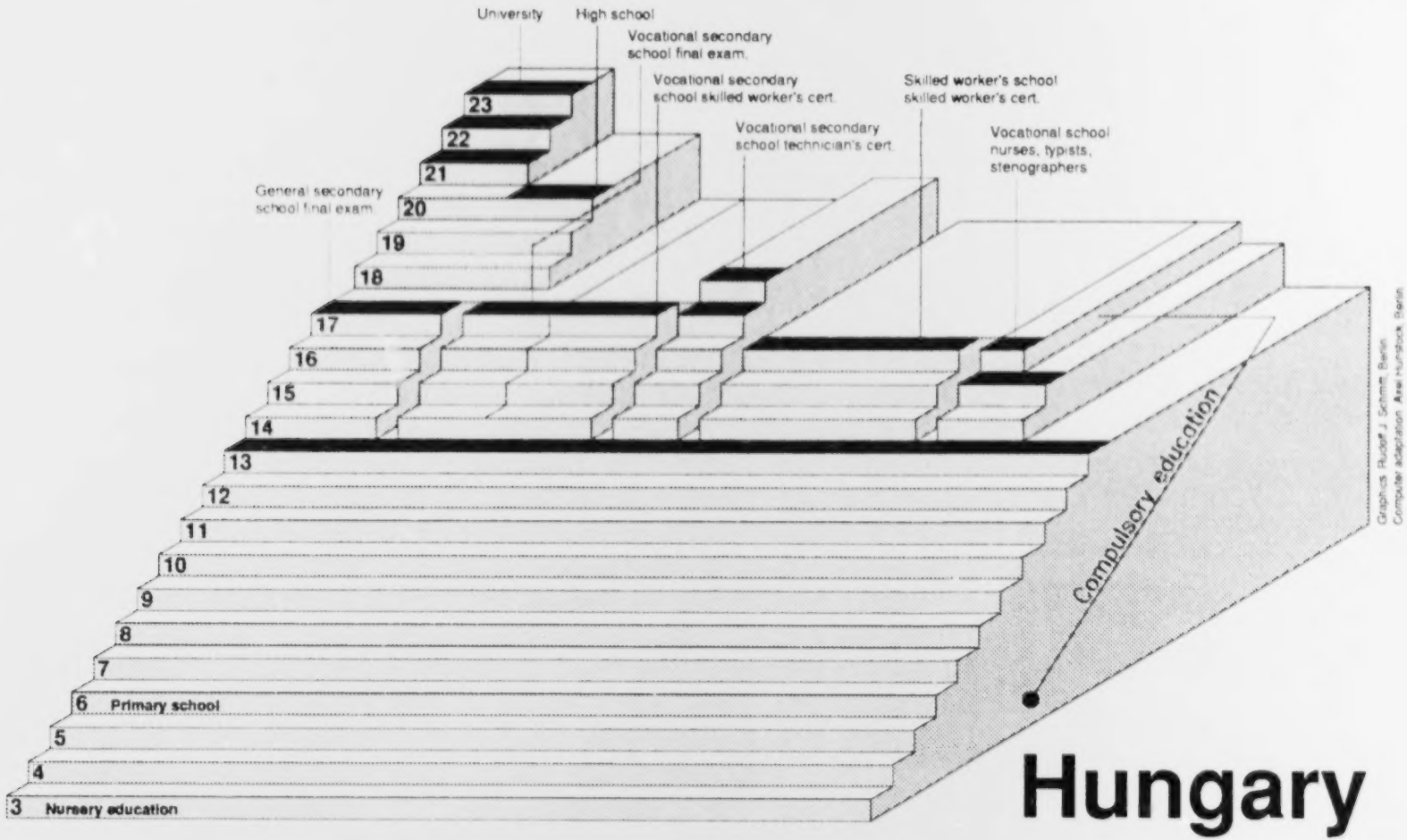
University
High school
Vocational secondary school final exam.
Vocational secondary school skilled worker's cert.
Skilled worker's school skilled worker's cert.
Vocational secondary school technician's cert.
Vocational school nurses, typists, stenographers
General secondary school final exam.
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6 Primary school
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3 Nursery education
Compulsory education
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Hungary

Introduction

In the last months of 1988, official relations between the European Community and individual east European countries had been established, crowning a long period of careful preparation. Before, individual EC countries had already entered bi-lateral agreements with east European countries, which sometimes also included issues of education and vocational training.

When CEDEFOP decided in 1988 to produce documentation on the vocational training systems of east European countries, nobody could have guessed that developments in these countries would be as radical as we witness them now. The initial idea indeed was quite modest: it was recognized how little we actually know about the state and developments in vocational training of east European countries in a period that has seen an increased interest for economic cooperation between them and the European community. The time had come, therefore, for CEDEFOP to contribute its share by closing some of the information gaps that existed. We hope that the present series of documentations on Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and the Soviet Union will add something to a better understanding of these countries. The studies present the problems of vocational training in view of developments in technology, work organization and qualification structures. Some of the studies are quite critical in their analysis and they paint in certain respects a dramatic situation. In other respects, though, interesting initiatives have been developed which are worth closer examination by the parties concerned in west European countries.

However, there was not only a growing need for information (on both sides, as a matter of fact, proved by the numerous requests for information received from vocational training experts of the east European countries), but also a growing desire for people to get to know each other. Thus, through the production of these documents we have attempted to bring existing networks in both parts of Europe together. The authors of the studies are all leading personalities in important research institutions in their countries and they have meanwhile been invited to participate in CEDEFOP's annual Forum of Research Institutes. In collaboration with the European Institute for Vocational Training in Paris, and with some of the Hungarian research institutes, CEDEFOP will organize an East-West European conference on vocational training in Budapest (18-19 January, 1990) to extend the network to practitioners and policy-makers. The present studies will serve as background information for participants. Summaries of the studies will be published in a special issue of CEDEFOP's journal which appears in all 9 languages of the European Community. We expect that this is only the beginning of a more intensive cooperation between the countries of Europe.

At the Arche summit, held in Paris from 14 to 15 July, 1989 the leaders of 24 Western countries entrusted to the European Commission responsibility for the coordination of their assistance to Poland and Hungary. A special Task Force was created within the Commission which defined as one of its priority fields of action: vocational training and management education (Task Force PHARE, Poland and Hungary, Assistance for Economic Restructuring). Besides coordinating the assistance from the Group of 24, PHARE also had to develop aid programmes to be financed from the Commission's own budget. CEDEFOP has been involved in the work of PHARE in this field from the beginning. The documentation that had meanwhile become available and the various contacts made in both countries proved to be extremely useful in analyzing the major problems of the two countries with respect to their vocational training systems.

In November 1989, at the meeting of Heads of State and Governments of the EC Member States in Paris, it was suggested that EC assistance in the field of vocational training and education should concentrate on two major activities: the opening-up of existing exchange programmes for young people, and the development of a European Foundation for Training. While for the moment these action programmes are restricted to Poland and Hungary, it can be expected, given the radical developments that have and are taking place in the other countries of eastern Europe, that sooner or later their scope will be broadened. Against this background, CEDEFOP will continue to play its role as a platform for those involved in vocational training. With the further integration of Europe it will obviously have to weave in other European countries into its networks.

I am grateful to the authors for providing us with such valuable information. While for many readers this will probably be the first occasion to receive first-hand information, they will realize the common historical traditions and they will recognize the similarity of problems with which east European countries see themselves confronted. Perhaps they will even identify some of the solutions the eastern countries have developed. It is in a spirit of better mutual understanding and desire for intensive future cooperation that these reports have been written.

Peter Grootings
Coordinator

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Hungary has been faced with economic crisis since the end of the 1980's: its international debt has doubled since 1980 while its national economy has remained in stagnation; its restructuring, badly needed to meet the growing demands for competitiveness and flexibility, has failed to get off the ground and there has been a slump in technological development. To meet the challenges of this situation, the Hungarian government has accelerated the process of economic reform (launched in 1968, but halted in the 1970's) with the aim of the establishment of a "socialist market economy"; its measures include a curtailment of the state's role in the economy, a reduction of state subsidies to industry, scope for the forces of the market and competition, the legalization of enterprise shutdowns and unemployment, the promotion of entrepreneurship, including the private sector, and companies based on foreign capital. In this context, human resources - the only outstanding resources in a country poor in materials and energy resources and with an obselete technological infrastructure - are destined to play a key role. This fact underlines the importance of qualified manpower and education as well as vocational training as a means providing the economy with such manpower.

Hungary's national economy is only modestly advanced in technology and lags behind the industrialized market economies - a phenomenon which, because of shrinking investment funds and their inefficient utilization, has unfortunately increased in the 1980's. Technological progress - the introduction of high technology - has mainly been concentrated on industry and agriculture; certain activities (e.g. banking, retail trade, the health service) have so far remained unaffected. In 1987, there were 64 983 computers (including 62 893 microcomputers) in the whole of the economy; of a total active population of 4.6 million, only 23 716 worked in computer-related jobs. Only a dozen CAD/CAM systems were in use and the number of robots did not exceed 100. Electronical machines and equipment accounted for 18.5% (complete electronical systems only 0.9%) of the machinery used in the national economy (gross values). The proportion of manual jobs still ran at 60% of all jobs (1984). Autonomous work-groups and participation nevertheless gained increasing momentum in the field of work organization. The relationship between technological progress and education, including vocational training, is to be considered in the following against this background.

Vocational training: Institutions and output

In the 1950's, Hungary's vocational training system broke away from its pre-war traditions, dating back to the Austro-Hungarian monarchy. A new system was built up following the model of the other planned economies: its major features include a high level of institutionalization, in particular as far as the initial training of young people is concerned, the determination to make vocational training (or at least its major streams) an integral part of the state school system and a considerable degree of centralization as well as a predominance of centralized regulations and centralized state agencies in the running of the system, its costs being covered mainly from the budget. This model establishes strict limits on the influence of both the suppliers and users of qualified labour on decision-making in the field of vocational training, i.e. relating to training institutions, enterprises and other organizations. The question is: to what extent has this vocational training system reflected that given level of technology, has it impeded or - on the contrary - paved the way for technological advance?

The state school system

In the Hungarian state school system (see fig. no. 1), general compulsory education lasts until the age of 16. Following primary school (8 years), young people can choose between two major streams of secondary or intermediate level of education: **general secondary schools** and the institutions of secondary or intermediate level **vocational training**. In fact approx. 95% (1987) of young people go on to secondary or intermediate level following primary school, a minority (about 21% in 1987) at general secondary schools and the majority (about 74%) at the various institutions of secondary-level vocational training.

In the state school system, secondary or intermediate-level vocational training is based on three major distinct institutions:

a) **vocational secondary schools** (4 or 5 years)
b) **skilled workers's schools** (3 years)
c) **vocational schools** (2 or 3 years).

The most popular, and indeed most controversial, are the **vocational secondary schools** which have undergone several "reforms" - most recently after 1985 - since their establishment in 1961. These schools assume a series of complementary (often contradictory) functions; they impart a general academic education and specialized knowledge in certain skills and occupations; their students leave with a skilled workers' certificate, the secondary school final examination *(baccalaureate)* and recently (since 1985 in 5 years) with the technician's certificate. Vocational secondary schools cover training in a large number of skills and occupations (for all sectors of the national economy, including

those in the material and non-material spheres *(The "material" sphere of the national economy includes industry, construction, agriculture and forestry, post and telecommunications, commerce, water supply while the "non-material" sphere covers the following activities: personal and economic services, health, social and cultural services and public (state) administration)*, see Table 1), according to a wide variety of curricula (most of which have been introduced since 1985). 41.6% (1986-87) of students in intermediate-level vocational training attend vocational secondary schools.*(See Annex, Table 1 and 2)*

Skilled Workers' Schools are the traditional and equally important institutions of secondary vocational training: they concentrate on providing specialized (theoretical and practical) knowledge for a large number of varied skills (mostly the material sphere of the national economy): their students take a skilled workers' examination and are awarded the skilled workers' certificate. 55.3% of students in intermediate-level vocational training attend skilled workers' schools.

Vocational schools are the least important of the institutions of intermediate-level vocational education and have traditionally had a separate status. In fact they are limited to the training of typists, stenographers and nurses for the health service (a third type of vocational school caters for slow learners). The proportion of intermediate-level vocational education students at vocational schools is low (approx. 4%).
(See Table 2 for the distribution of students among the three major institutions of intermediate-level vocational education).
In secondary and intermediate-level education there are **day** (the general rule), **evening** and **correspondence** forms of education. The ratio of the former was 72% and of the latter two 28% among secondary school-leavers in 1985. (See Table 3).

Access to the institutions of secondary or intermediate-level vocational training **is also given to secondary school-leavers**; in such cases the same qualifications can be acquired **in a shorter training period:** at vocational secondary schools it is 2 years (instead of 4) and at skilled workers' schools 1-2 years (as opposed to 3 years). The ratio of secondary school graduates among skilled workers' school students was 3.6% in 1985. Vocational secondary schools offer special types of complementary training for secondary school-leavers *(foreign trade correspondent, tourist guide)*: in certain skills vocational secondary training is limited to secondary school-leavers*(gold- and silver-smith, photographer, wood-carver, dental mechanic, beauty-specialist, window-dresser, optician)* or adults *(bee-keeper, bookseller, shipman, boat-builder, driver, certain metallurgical skills (with hard working conditions))*.
In the state school system in 1985, 40 133 young people passed the vocational secondary school final examination, 52 345 young people acquired the skilled workers' certificate and 3 368 graduated from vocational schools, giving a total of 95 846.

Training courses
Over and above the state school system, **training courses- providing both initial and further training and recently also retraining** - are institutions of importance in the Hungarian vocational training system.

Training courses are organized by various organizations - primarily by enterprises and training centres, but very often by the institutions of the state school system and sometimes by central state agencies, local authorities or other bodies. These courses provide training for semi-skilled workers, prepare participants for the skilled workers' examination, foreman or assistant foreman positions, etc. They cover practically all the fields of the national economy and society: both the material and non-material spheres. These courses vary in length from only several hours (27.2% last less than 30 hours) to several hundred hours (21.6% last more than 150 hours) and are held partly outside and partly during official working hours. Participants in training courses are mostly adults: in 1986 57.8% belonged to the 30-49 age-bracket, 6.9% were above 50, while only 29.3% were younger than 29. (See Tables 4-7).
Training courses are either financed by the organizers or the participants or the costs are divided between the two (unlike vocational training in the state school system, funded from the budget and - at least in principle - gratuitious).
In 1985, 126 063 persons obtained initial and 174 889 further training*(Excluding management training and preparatory courses for state language examinations)*, partly in manual and non-manual jobs in the framework of training courses.

The institutions of **higher level vocational training** in the state school system are the high schools and universities. **High schools** (generally 3 years of training), which provide both the material and non-material sphere of the economy with highly skilled manpower, are specialized according to their specific field (high schools of engineering, electro-technology, construction, agriculture, forestry, commerce and catering, gardening and viticulture, foreign trade, finances and accounting, etc.). **Universities** (4-6 years of training) issue professionals (e.g. engineers, physicians, economists, lawyers, etc.) with "diplomas". High schools and universities also offer day, evening and correspondence courses.

After passing the final examination at a general or vocational secondary school*(An exception to this rule was the experimental direct transition of skilled workers to universities in the 1970's - an experiment that has largely proved disappointing)*, young people (or adults) can enter high schools or universities - provided they pass the entrance examination and are within the limits of the administrative quotas set by the state. (The latter have been primarily responsible for the relatively low ratio of high school and university graduates in Hungary in recent decades). (For the number and ratio of school-leavers, see Fig. 2 and Table 8). *(See Annex, table 3,4,5 and 6)*

Vocational training: Problems and dilemmas

Secondary (or intermediate-level) vocational training *(this paper - as its title indicates - is limited to vocational (or intermediate-level) secondary training)*, both inside and outside the Hungarian state school system **has been faced with mounting difficulties in the 1980's**: the problems emerging at the level of vocational secondary schools and skilled workers' schools as well as in training courses have been partly identical, partly different in nature. They shall be discussed together in the following with reference to the specific training route as appropriate.

1) A controversial process of **integration and specialization** has taken place in the entire vocational secondary state school system: from the 1950's to the mid-1970's, the number of specialized occupations and skills fell from about 200 to 128; later further specialization in the vocational secondary schools and the introduction of specialized technicians' training led to the creation of new occupations and skills whose number currently exceeds 300. Skilled workers' schools offer qualifications in 164 skills, vocational secondary schools in 95 skills, without mentioning the other forms of skilled worker training (for details see Table 9). It is the general opinion that **vocational secondary training is "overspecialized"**, rather than providing its students with a "general orientation" or "convertible knowledge". However criticism is also voiced in the opposite extreme, mainly by industrial organizations which consider (openly or tacitly) the degree of specialization insufficient and reproach vocational secondary education for its failure to provide "ready-made workers". In any case, the present level of specialization is a factor which renders vocational secondary training rigid, costly and difficult to manage. *(See annex, table 7,8,9 and 10)*

2) Vocational secondary training, it is generally believed, **does not adapt flexibly and rapidly enough to the new demands of technological development and the changing structure of the economy**. Micro-electronics, computer science, biotechnology, information on modern materials and flexible manufacturing systems are all subjects which show a deficit at this level. The curricula of the vocational secondary schools date back to 1978/80 (with the exception of technician training, 1984); in the field of skilled worker training they were elaborated in the 1970's. The structure of the skills and knowledge taught at skilled workers' schools has remained virtually unchanged since 1971. Training materials were largely drawn up in the 1970's and reflect the technological state of the art and organizational principles of that time. Certain sources estimate that the contents of vocational training are lagging behind even the (moderately advanced) level of technology in Hungary by as much as a decade. At the same time, debates are going on as to whether vocational training should be aimed at the technology of the "present" or the "future" (i.e. Western Europe's present technology). Despite the particularly marked backwardness of skilled workers' schools, the labour market still showed a surplus demand for young people from these establishments in 1985/86 (while the demand for those leaving other types of vocational school was in decline).

3) Vocational training and computer-based technologies

As already indicated, computer-based technologies have barely penetrated into the Hungarian economy. Only 63 000 microcomputers are to be found nationwide; these are scattered over various fields (industry, households) but they are very few and far between in schools. **Primary and secondary schools often cannot even afford a set of COMMODORE 64** computers - one of the most simple and widespread machines to be found in the market economies. In primary schools, students generally have no access whatsoever to computers. In secondary general schools, also badly equipped with computers, computer science is an optional subject, tuition lasting from six to eighteen months, offering very little scope for students' practical training. Vocational secondary schools are in general better equipped - they frequently have computer rooms with various types of microcomputers - but these facilities are not adequate to offer students the opportunity of regular practice. **Curricula, introduced 10-15 years ago reflecting the nation's then state of the art in computer science,** contain such "fossils" as punch cards and tapes and computers working with these obsolete instruments. Computer science, moreover, is regarded as a **"separate subject"** and training in this field is aimed at the output of computer specialists for "big machines" of remote times: programmers, system organizers and computer electricians. Although

recent teaching experiments have been conducted with this aim in mind, computer science has not yet been integrated into other subjects which by their very nature require knowledge of EDP as an absolute prerequisite. Computers are used for abstract calculations, e.g. the surface of the sphere, but not so much in the teaching of business accounting. Finally, teachers themselves have very limited knowledge of computer science - if any at all; education in this field in the universities started with a considerable time-lag and remains very limited.

4) Training courses have a key role to play in the field of training in computer-based technologies in Hungary.
The qualification provided by some of these courses is said to be equal to that of a university degree in this field. In fact, high level training courses of some 600 hours of training offer a solid knowledge of programming and systems organization; they turn out people who can meet the requirements of enterprises in the material sphere, but do not however compensate for the shortage of professionals in other fields (teaching staff in computer science in vocational training), i.e. the lack of university graduates. The award of officially recognized high-level qualifications in computer technology has been "monopolized" by one training centre, although similar training courses have been organized by several other institutions for the past few years. Training for special purposes in the application of computer-based high technology - e.g. the operation of CAD/CAM systems - has been faced with serious difficulties: in the few cases we have investigated, training was provided by joint efforts of the enterprises' technical staff (with the assistance of the experts of the Technical University) and the supplier of the equipment, involving a considerable amount of "practical experimentation" with the machinery and autodidactic training. **Computer technology** (and knowledge related to "high tech" in general) **has yet to be adequately integrated into vocational training in Hungary**. At the moment, vocational training is still in the "teething stages" as far as EDP is concerned.

5) In the 1970's and 1980's certain changes took place in **work organization** in Hungary: new collective forms of work organization developed: workgroups and their members have gained more autonomy and have taken over certain supervisory functions. Participation in decision-making has increased. However there **has so far been no sign of rection** to such changes **in the field of vocational training.**

6) Vocational secondary training **is not adequately supported by the general education system.** A general criticism is that its institutions, especially skilled workers' schools, have to content themselves with "poor quality" primary school-leavers; students entering skilled workers' schools very often do not even master the three R's and remedial teaching of these low achievers can only be implemented at the expense of special (theoretical and practical) training. Young people often enter skilled workers' schools because they have no other alternative - which is a decisive factor in the decline in status of the skilled worker - a phenomenon which contributes to the often poor quality of training and training personnel. **The drop-out rate among students is considerable**: in the training period 1982/85 it stood at on average 24.3% (in textile industry skills 44.4%, in metallurgical skills 44.2%, but among electrical mechanics only 3.6% and motor vehicle mechanics 11.8%, reflecting the very different socical status of the various skills).

7) **Vocational secondary schools are a cross-breed between general secondary schools and skilled workers' schools** in the state school system. Unlike the former, they offer vocational qualifications enabling their graduates to find a qualified job. At the same time, they offer transition to higher level vocational training (high schools and universities), unlike the skilled workers' schools which represent a dead end within the education system. Their achievements in these two fields, as their critics often point out, appear controversial. Firstly, the level of general knowledge attainment (and the prestige of their final secondary school examination) very often **lags behind that acquired at general secondary schools:** their graduates are usually at a disadvantage faced with competition for places in high schools and universities; the most prestigious of higher level education institutions seem to prefer the graduates of general secondary schools.
Secondly, the qualification they provide is often criticized: **the specialized knowledge they impart does not exceed the level of skilled workers' schools** and in many respects (practical training) is below that level. Some say: "the economy can make a better use of skilled workers' school graduates". (For the contents of training see Table 10).

8) **Financial, material and personnel conditions** in vocational secondary training **have always been unsatisfactory and have been in constant deteroriation**. While in 1970-75 the institutions of intermediate-level education (including vocational secondary training) had a 32.6% share (and skilled worker training a 12.7% share) of total investment in education, these proportions fell to 12.1%/7.5% respectively in the period 1980-85. There is a shortage of classrooms and a correspondingly high number of emergency classrooms. The machines used in training workshops are mostly out-of-date, in poor condition and badly maintained. Textbooks

are inadequate: these institutions use 2 000 (!) textbooks for training purposes, the revision of which (because of financial limits) cannot be realized for 20 years. Skilled workers' schools seem to be relatively well supplied as far as their staff complement is concerned (at 96% level), but they show a shortage of personnel in certain key subjects and the quality of their staff is often criticized (there is a general shortage e.g. of EDP teachers as universities started training students in this field unwillingly and belatedly). The quality of vocational training has been negatively affected by the **low level of teacher's salaries** (in conjunction with the generally low wage-levels in the education and non-material sectors), **usually lower than those of skilled workers in the manufacturing sectors.**
(Tables 11-12 show the personnel and material conditions of Hungarian skilled worker and vocational secondary schools).

9) Vocational secondary training **functions under an intricate** system of state supervision. Since 1985, central state supervision has been divided between the Ministry of Education, the sectoral ministries and other central agencies (including the Ministries of Industry - the most important of those involved - Transport, Construction, Agriculture and the Food Industry and Health, the Central Statistical Office, etc.), (see Table 9). At the same time, the schools themselves are run by the local authorities (i.e. the local bodies of the state administration), with some rare exceptions when they belong to enterprises *(e.g. the Paks Atomic Energy Works)*.
This structure of supervision in principle offers a good opportunity to confront (and work out compromises among) the often **diverging and conflicting endeavours and interests of educational and economic policy, the requirements of technological development, structural changes, the labour market, employment,** etc. In practice, however, the supervisory central state agencies **often shirk** from their responsibility and the enterprises (from the appropriate sector) are proving to be increasingly indifferent with respect to the provision of vocational training. Especially the latter seem to feel that it is excessively expensive for them (in a tight economic situation) and fail to meet their skilled manpower requirements. (Previously, up to 1981, vocational training was supervised by the Ministry of Labour). *(See annex, table 11, 12and 13)*

10) The major contribution of the enterprises to vocational training has been the running of training workshops:
in 1986/87, 85.6% of skilled workers' school students received their practical training in industrial workshops (the corrresponding ratio among vocational secondary school students was 44-50%). The enterprises cover the costs of machines, tools and materials, including protective and occupational clothing, and moreover pay scholarships and social benefits. Since 1976, enterprises have been able to fall back on budgetary subsidies from the **Skilled Worker Training Fund.** (This fund was created from obligatory contributions from the enterprises themselves, running at 0.2-0.33% of their wage bills). Subsidies however hardly eased the burden on the enterprises and were not able to help practical training for vocational secondary schools. Hence in the tight economic situation of the 1980's, enterprises have proved less willing to maintain training workshops. In fact they have often limited their costs in this field to the corresponding amount earned by the production of their trainees. In 1988, a new **Vocational Training Fund** was established by law to which enterprises have to contribute 1.5% of their wage bills (minus expenses actually spent on initial vocational training). (Fig. 3).

11) Training courses - providing initial and further training - appear to have **the obvious function of complementing vocational training** in the state school system and - to a certain degree - of compensating for its insufficiency and rigidity. Their output is three times that of the state school system. Training courses are highly specialized: in 1986 there were 397 training courses leading to manual and 385 training courses for non-manual occupations (of which the number of training courses in industry stood at 249/175 respectively). Most of these courses were run by economic organizations (enterprises, cooperatives, etc. 28%) or by training centres *(Training centres function under identical conditions to those of enterprises i.e. living from their income and profits from training courses without (in principle) budgetary subsidies)* (28.2%). In most cases, costs were covered by the enterprises (58.8%), by the participants (25.9%) or divided between the two (11,7%). Most took place (at least partly) during working hours (see Tables 13-15). These facts provide an example of the commitment of the enterprises and other economic organizations to this form of vocational training, a commitment that appears to be stronger than in case of vocational training in the state school system. The explanation lies in the fact that they mostly provide **the specialized skills required by the structure and technology of the economy.** *(See annex, table 14,15,16 and 17)*

12) As training courses are based on local initiatives (by industrial organizations, training centres, etc.) and are loosely supervised by the central state agencies *(In 1988 the government issued a decree aimed at regulating this form of vocational training)*, it is difficult to assess their quality:
(i) **they fill in** certain definite **gaps** in the state school system (EDP, e.g. has been taught mostly in training courses in recent years);

(ii) **the value of the qualification** provided **varies** according to the "market" (the demand e.g. for EDP is high), the quality of training (certain training centres have a good reputation, e.g. SZAMALK in EDP) and the status of the organizer (qualifications from training courses implemented by the Ministry of Finance, e.g. are usually held in high esteem);
(iii) **their charges are sometimes relatively moderate but often rather expensive;** if they are self-financed or profit-oriented (if organized by training centres), they are very often better supplied with training facilities than vocational training in the school system financed from the budget. (Such generalizations should however be treated with caution because of the wide variety of very differing training courses).

13) Vocational training and employment. Despite a constant dearth of labour for decades, vocational training within the state education system has tended to exacerbate rather than reduce **the structural tensions in employment**. Its output has always been dependent on the interplay between the diverging and often conflicting interests of the social protagonists: local authorities (in control of the schools), the enterprises (employing those leaving the schools), the schools themselves and finally the students. The **structure of skills** and the **output of persons trained** in given skills have been the focal point of such conflicts. The procedure is as follows:

(i) The enterprises give an indication of their skill structure and manpower requirements (with no obligation however to hire the appropriate manpower and no guarantee that it shall be provided;
(ii) On the basis of the requirements indicated by the enterprises, local authorities make their plans for student registration;
(iii) The schools, having received theise plans, attempt to coordinate their teaching capacity accordingly and begin the registration procedure;
(iv) Registration in certain "fashionable" skills exceeds expectations whereas in other fields (characterized by a shortage of labour) registration numbers fall short of demand;
(v) There is a high drop-out rate in the course of the academic year; moreover a number of skilled persons leave school and seek employment in jobs outside their specific field of training. This creates a considerable **structural imbalance** between the manpower requirements of the enterprises as originally indicated and those actually leaving the vocational schools and seeking employment. This embalance in times of a chronic dearth of labour has been manifested by the permanent existence of **skills characterized by a shortage** of labour; nowadays, when unemployment is an imminent danger, it is manifested by the fact that there is no demand at the level of the enterprises for a proportion of those leaving vocational training. (See Table 16).

14) To ease tensions in employment, state-subsidized **retraining** schemes were launched in Hungary in 1983; these schemes have a dual function: to prevent (or reduce) unemployment and to ease the shortage of labour *(the Hungarian economy is characterized by structural imbalances in employment: in 1988 it had somewhat more than 10 000 registered unemployed compared to 60 000 vacant jobs).* In 1988, 14 425 employed workers, the majority women, participated in this programme; most of them were trained for semi-skilled jobs. In 1988 this programme was extended to include the unemployed; in 1988 453 unemployed workers were retrained in 24 courses, mostly for jobs hit by a scarcity of labour (waiters, salesmen, various industrial skills); unemployed secondary school-leavers mainly received retraining for jobs in the financial and health services. State subsidies for retraining courses are organized **by the employers or local authorities**. Employment-oriented retraining has mainly concentrated on regions hit by unemployment (Borsod-Abauj-Zemplén, Szabolcs-Szatmár etc. counties). Retraining resources stem from the government's Employment Fund. *(See annex, table 18)*

15) The **scientific background** of vocational training in Hungary **is limited**: only a handful of people are engaged in research (see literature in the annex); the most important institute is Országos Pedagógiai Intézet **(National Pedagogical Institute)** and the major journal with theoretical and practical orientation is "Szakképzési Szemle" **(Vocational Training Review)**. Research is essentially concentrated on the pedagogical aspects of vocational training: its relationship with the functioning of the economy)i.e. with technological development) has not yet been devoted the necessary attention.

The gravity of these dilemmas is underlined by the prospects for the coming five years: **the number of students,** according to official estimates, will increase by 30% in vocational secondary training and there shall be a similar growth in the number of those entering the labour market because of the population growth of the 1970's. Young people of school age are as follows:

Age	Number
17	146 594
16	145 202
15	148 013
14	152 172
13	178 821
12	187 192
11	179 466
10	172 437

Future prospects for Vocational Training

The **output of the Hungarian vocational training system has slowly and gradually increased** since the early 1970's. While the ratio of skilled workers among school-leavers has remained in stagnation (36.9% in 1971 and 37.7% in 1987), that of vocational secondary school-leavers has increased considerably (from 9.5% in 1971 to 17.9% in 1987). A certain degree of growth has also been observed in the ratio of university and high school graduates (from 6.1% in 1971 to 10.3% in 1987). Despite this improvement, the Hungarian vocational training system has become **the subject of repeated criticism**. This criticism is centered on the following factors: its high level of institutionalization, its centralization and the predominance of central regulations and central agencies in its operation, its lack of effective and efficient training programmes, the low level of utilization of its resources - and last but not least - its insensitivity towards the real needs of the national economy. A key issue in this context is the fact that **vocational training fails to respond to technological progress,** to the demands of present and future "high technology". While the debate continues, life itself has developed certain remedies (the mushrooming of training courses) and certain changes (some of which have been mentioned above) have also been launched by the central agencies to adopt the system to the present-day requirements, continuing a line of repeated corrections over the past 20-30 years. Proposals for a root-and-branch reform of the system have also emerged from the debate.
As far as the future development of the system is concerned, a certain degree of consensus appears to exist on the following:

1) The essential tasks of vocational training **are to be implemented by the two existing institutions;** the state school system and the training courses; their relationship however should be better coordinated and harmonized: to this end a clear definition of their functions and a clearcut division of their tasks are necessary.

2) The state school system **is to abandon its ambitions to adopt itself to the current manpower requirements** of the economy instead it is to provide its students with solid, broadly-based, long-term knowledge, giving them direct access to certain qualified jobs, and - even more important - to any further specialization (in training or retraining courses). Those leaving would not be "ready-made workers", but people capable of adaptation.

3) **The state school system must be improved in three respects:** firstly, it must give up its present "over-specialization"; secondly, its quality must be increased: vocational secondary schools (4 years) would become predominant. Traditional skilled workers' schools (3 years) would be maintained only for skills of primarily a manual nature. Thirdly, vocational secondary schools would give more emphasis to up-to-date knowledge (micro-electronics, computer technology, biotechnology, etc.).

4) **Social circles**, directly engaged in vocational training and in the utilization of its "output", **are to be given more say and influence in the running of the system**; the autonomy of schools is to be increased; enterprises should be involved in the control (and financing) of not only skilled workers' practical training, but in the whole of vocational training; the autonomy of local authorities in the running of schools is also to be reinforced. In a nutshell: further **decentralization** is needed.

5) Financial resources should be "mixed", stemming partly from the budget and partly from the enterprises (as indicated by the establishment of the Vocational Training Fund and the increase in training courses). The state agencies (the Ministry of Education, sectoral ministries) **should retain their role in supplying most of the personnel and material conditions** for vocational training. State agencies and their institutions would continue to assist vocational training in the elaboration of training curricula and materials.

6) The above approach to vocational training in the state school system appears to **open up considerable scope for training courses** outside this system, mainly based on company-based (or other local) initiatives, oriented towards the "market", hopefully with better-defined assistance and supervision on the part of the state. Their importance is underlined by their tendency to take over "specialized training" from the state school system.
Vocational training is dependent partly on the **economic** and partly on **the educational system**. In modern-day Hungary, there is a serious contradiction, in our opinion, between the state's efforts to promote reform in the national economy, to further economic restructuring and technological progress and to achieve an economic recovery, on the one hand, and the state's policy vis-à-vis human resources (among others, education and training), crippled by the persistent dearth and gradual erosion of funds, on the other. In the process of the redistribution of national income, overshadowed by this contradiction, the state's human resources policy tends to be victimized: real wages have kept declining, social benefits have been eroded by inflation and the government is tending to rid itself of several of its traditional commitments in social and educational services. While the reform ideology of promoting "market socialism" in itself represents a step forward from the traditional predominant role of the state in the economy and society - including educa-

tion and vocational training - it often proves to be a pretext for cuts in the budget, whether or not these are actually justified by the real needs of economic and social progress. In the final analysis, the danger is that even a more decentralized, market-oriented vocational training system may not lead to the expected results.

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Annex

Some sources of factual information on vocational training in Hungary

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Tanfolyami Szakoktatás. (Training Courses) 1986. Központi Statisztikai Hivatal, Budapest, 1988, 234 p.

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Oktatás Müvelödés. (Education, Culture), 1950-1985. Központi Statisztikai Hivatal, Budapest, 1986, 216 p.

Major vocational training institutions

Müvelödési Minisztérium
Tel: 530-600
(Ministry of Education)
Budapest V.
Szalay u. 10/14
1055.

Ipari Minisztérium
Tel: 565-566
(Ministry of Industry)
Budapest II.
Mártirok utja 85.
1024.

Mezögadasági és Elelmezésügyi Minisztérium
Tel: 533-000
(Ministry for Agriculture and the Food Industry)
Budapest V.
Kossuth L. tér 11.
1053.

Szociális és Egészségügyi Minisztérium
Tel: 323-100
(Ministry for Social Affairs and Health)[1]
329-700
Budapest V.
Arany J. u. 6/8.
1051.

Közlekedési, Hirközlési és Epitésügyi
Tel: 220-220
Minisztérium (Ministry for Transport,
414-300
Telecommunications and Construction)[1]
420-520
Budapest VII.
Dob u. 75/81.
1077.

Kereskedelmi Minisztérium
Tel: 530-000
(Ministry for Commerce)[1]
Budapest V.
Honvéd u. 13-15.
1055.

Környezetvédelmi és Vizgazdálkodási
Tel: 154-840
Minisztérium (Ministry for Protection of Environment and Water Supply)[1]
Budapest II.
Fö u. 44-50.
1011.

Központi Statisztikai Hivatal
Tel: 152-850
(Central Statistical Office)
159-240
Budapest II.
Keleti I. u. 5-7.
1024.

Pénzügyminisztérium
Tel: 182-600
(Ministry of Finance)
Budapest V.
József nádor tér 2/4.
1051.

Országos Tervhivatal
Tel: 123-480
(National Planning Office)
110-200
Budapest V.
Roosevelt tér 7/8.
1051.

Allami Bér- és Munkaügyi Hivatal
Tel: 322-100
(State Office for Wages and Labour)
327-320
Budapest V.
Roosevelt tér 7/8.
1051.

Országos Pedagógiai Intézet
Tel: 211-200
(National Pedagogical Institute)
Budapest VII.
Gorkij fasor 17/21.
1071.

Oktatáskutató Intézet
Tel: 201-150
(Institute for Education Research)
290-210
Budapest XIII.
Victor Hugo u. 18/22.
1132.

Munkaügyi Kutatóintézet
Tel: 316-770
(Institute for Labour Research)
327-787
Budapest VI.
Mozsár u. 14.
1066.

Magyar Gazdasági Kamara
Tel: 533-333
(Hungarian Chamber of Economies)
Budapest V.
Kossuth L. tér 6/8.
1053.

Szakszervezetek Országos Tanácsa
Tel: 532-900
(National Council of Trade Unions)
Budapest VI.
Dózsa György ut 84/b.
1068.

[1] *New ministries created by the ongoing reorganization of state administration.*

A selection of legislation on vocational training

24/1977. (XII.28.) Müm-OM. Szakközépiskolákban folyó szakmunkásképzésröl (Joint Decree of the Ministers of Labour and Education on skilled worker training at vocational secondary schools. No. 24/1977. Amendment to this Joint Decree, No. 14/1976 (XII.1.)

25/1977. (XII.28.) A szakmunkásképzésröl szóló 1969. évi VI. törvény végrehajtására kiadott 13/1969. (XII. 30.) Müm rendelet módositásáról (Decree of the Minister of Labour on the application of Law No. VI/1969 on skilled worker training)

1/1978. (I.14.) OM Müm. A középfoku képzési célu szakközépiskolák szakositásáról (Joint Decree of the Ministers of Labour and Education on the specialization of vocational secondary schools. No. 1/1978 I. 14.)

16/1984. (IX.12.) MM. A müszaki szakközépiskolákban folyó technikus és szakmunkásképzésröl. (Decree by the Minister of Education on technician and skilled worker training at technical vocational secondary schools. No. 16/1984. IX.12.)

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18/1986. (VIII.26.) MM. A felnötteknek az országos szakmunkásképzési jegyzékben (OSZJ) meghatározott szakmákról ... a szakközépsikolákban oktatható szakokról. (Decree of the Minister of Education on skills for adult training at vocational secondary schools No. 18/1986. VIII.26.)

14/1987. (VI.30.) MM. Az óvódák, az alsó-és középfoku iskolák diákotthonok és kollégiumok ... helyiterületi irányitásárol szóló jogszabály. (Decree of the Minister of Education on the local/regional management of nurseries, primary and secondary schools and student residences No. 14/1987. VI.30.)

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1988. évi XXIII. tv. a szakképzési hozzájárulásról és a Szakképzési Alapról (Law on contributions to vocational training and on the Vocational Training Fund. No. XXIII.1988.)

5/1989. (I.15.) PM. rendelet Iskolarendszeren kivüli szakmai oktatás költségeiröl, elszámolásáról. (Decree of the Minister of Finance on the costs and accounts of vocational training outside the school system. No. 5/1989. I.15.)

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Table No 1.

Hungarian secondary school-leavers

Their number and distribution

General secondary school	Secondary vocational school											
	Indus-trial	Agri-cultural	Economic	Commer-cial	Restaurant and hotellery	Commu-nication	Postal	Health service	Teachers, nurses	Artists	Sub-total	Total
30894	11476	2992	4570	..	..	..	..	-	..	318	30866	61760
(50.02)	(18.58)	(4.84)	(7.40)	..	..	..	..	-	..	(0.51)	(49.98)	(100.0)
32223	18673	3149	10288	2566	759	326	366	2813	299	430	39669	71892
(44.82)	(25.97)	(4.38)	(14.31)	(3.57)	(1.06)	(0.45)	(0.51)	(3.91)	(0.42)	(0.60)	(55.18)	(100.0)
28731	21589	2785	8929	2672	1090	648	588	2721	1545	486	43053	71784
(40.02)	(30.07)	(3.88)	(12.44)	(3.72)	(1.53)	(0.90)	(0.82)	(3.79)	(2.15)	(0.68)	(59.98)	(100.0)
26659	20594	2716	8491	2703	1175	489	627	2820	1594	450	41659	68318
(39.02)	(30.14)	(3.97)	(12.43)	(3.96)	(1.72)	(0.72)	(0.92)	(4.13)	(2.33)	(0.66)	(60.98)	(100.00)
26616	20216	2534	8698	2569	1472	529	706	2967	1516	450	41657	68273
(38.98)	(29.61)	(3.72)	(12.74)	(3.76)	(2.16)	(0.77)	(1.03)	(4.35)	(2.22)	(0.66)	(61.02)	(100.0)
26560	19914	2584	8574	2623	1362	553	718	3136	1232	471	41167	67727
(39.22)	(29.40)	(3.82)	(12.66)	(3.87)	(2.01)	(0.82)	(1.06)	(4.63)	(1.82)	(0.69)	(60.78)	(100.0)
26443	18659	2687	7963	2450	1374	583	817	3197	1121	445	39296	65739
(40.22)	(28.38)	(4.09)	(12.11)	(3.73)	(2.09)	(0.89)	(1.24)	(4.86)	(1.71)	(0.68)	(59.78)	(100.0)
27647	18915	2875	7998	2667	1371	632	807	3317	1132	419	40113	67780
(40.79)	(27.92)	(4.24)	(11.80)	(3.93)	(2.02)	(0.93)	(1.19)	(4.89)	(1.67)	(0.62)	(59.21)	(100.0)

Source:

Central Statistical Office. Data include normal, evening and correspondence course students.

Table No. 2

Intermediate-level vocational training in Hungary
The distribution of students
(percentages)

Academic year	1971/72	1976/77	1981/82	1986/87
Medium level vocational training; type of school:				
- Skilled workers' school	65.6	57.9	55.7	55.3
- Vocational secondary school	34.4	39.4	41.4	41.6
Skilled worker training; type of school				
- Skilled workers' school	-	99.1	79.1	81.7
- Vocational secondary school	-	0.9	20.9	18.3
Intermediate-level vocational training; females at				
- Skilled workers' school	25.8	29.6	32.1	33.9
- Vocational secondary school	49.8	51.5	51.4	51.9
- Vocational schools		99.4	99.6	99.2
Vocational secondary schools aimed at				
- skilled worker training	-	1.3	35.9	29.8
- secondary vocational training	-	98.7	64.1	58.3
- training of technicians	-			11.9

Source: Statistics of the Ministry of Labour and of the Ministry of Education (Data exclude students in evening and correspondence courses).

Table No 5.

Secondary school-leavers at day, evening and correspondence courses

Their number and distribution

Year	Day	Evening and correspondence	Total
1970.	44588	17172	61760
	(72.20)	(27.80)	(100.00)
1975.	46338	25554	71892
	(64.46)	(35.54)	(100.00)
1980.	43167	28617	71784
	(60.13)	(39.87)	(100.00)
1982.	42266	26052	68318
	(61.87)	(38.13)	(100.00)
1982.	44414	23859	68273
	(65.05)	(34.95)	(100.00)
1983.	44802	22925	67727
	(66.15)	(33.85)	(100.00)
1984.	46409	19330	65739
	(70.60)	(29.40)	(100.00)
1985.	48723	19057	67780
	(71.88)	(28.12)	(100.00)

Source: Central Statistical Office.

Table No 4.

Successful participants in
vocational training courses in Hungary

Years	Training courses providing initial training: for manual jobs	for non-manual jobs	sub-total	Training courses providing further training: for manual jobs	for jobs requiring secondary level education	sub-total	Total
1970	97015	26406	123421	43089	40232	83321	206742
1975	70247	28565	98812	92268	41180	133448	232260
1980	86484	61664	148148	120139	75085	195224	343372
1981	86505	69000	155505	126107	54039	180146	335651
1982	78236	71872	150108	106445	67014	173459	323567
1983	85719	55361	141080	105701	76788	182489	323569
1984	71939	51916	123855	109388	75739	185127	308982
1985	67483	64022	131505	144260	47313	191573	323078
1986	68405	54872	123277	126063	48826	174889	298166
%	(22.94)	(18.41)	(41.35)	(42.28)	(16.38)	(58.65)	(100.00)

Source:
Central Statistical Office

Table No 5.

Training courses - no. of successful participants and course duration (1986)

	Training courses providing		Total	
	initial training	further training[1]	number	%
1 000 hours or more	6 375	5 769	12 144	2.91
500 - 999 hours	6 564	4 673	11 237	2.70
250 - 499 hours	18 946	8 223	27 169	6.52
150 - 249 hours	25 263	14 362	39 625	9.51
50 - 149 hours	33 151	48 210	81 361	19.53
30 - 49 hours	12 835	54 606	67 441	16.19
10 - 29 hours	12 977	67 905	80 882	19.41
1 - 9 hours	5 857	68 273	74 130	17.79
Without fixed hours or unknown	1 309	2 324	22 674	5.44
Total	123 277	274 345	416 663	100.00

1) including training of managers and preparation for state language exams.

Source:
Central Statistical Office

Table No 6. Training courses - no. of successful participants and organizational form (1986)

Organizational form	Training courses providing initial training: for manual jobs	for non-manual jobs	together	further training: for manual jobs	for non-manual jobs	together	Total number	%
Boarding course	8414	4941	13355	6939	15045	21984	35339	11.85
Full day course	7592	6584	14176	8977	5208	14185	28361	9.52
Course during working hours	13478	12625	26103	38216	13997	52213	78316	26.27
Course partly during working hours								
- more than 2/3	6284	2085	8369	3819	6201	10020	18389	6.17
- from 1/3 to 2/3	5756	8370	14126	12333	2998	15331	29457	9.88
- less than 1/3	10098	4979	15077	7134	2018	9152	24229	8.12
Course out of working hours	16106	12324	28430	34374	1655	36029	64459	21.61
Directed self-training								
- with consultations	420	1041	1461	8105	461	8566	10027	3.36
- with examination	235	1923	2158	6166	1243	7409	9567	3.21
Unknown	22	-	22	-	-	-	22	0.01
Total	68405	54872	123277	126063	48826	174889	298166	100.00

Source:

Central Statistical Office

Table No 7.

Successful participation in vocational training courses in Hungary - age structure

Age groups	29+	30-39	40-49	50+	Age unknown	Total
1980.	35.0	48,5		8.2	8.3	100.0
1981.	35.1	49.2		7.9	7.8	100.0
1982.	35.4	52,6		8.3	3.7	100.0
1983.	34.1	51.8		8.5	5.6	100.0
1984.	31.9	53.6		8.3	6.2	100.0
1985.	28.0	34.1	23.2	9.1	5.6	100.0
1986.	29.3	36.3	21.5	6.9	6.0	100.0

Source:
Central Statistical Office

Table No 8. Youth labour resources in Hungary (1971-87)

(School leavers who do not continue their studies)

Years	1971	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Higher education graduates	6.1	8.9	12.2	12.3	11.7	11.6	11.1	11.0	10.5	10.3	10.3
Completed secondary school or dropped out from higher education	16.7	20.1	23.5	21.4	20.8	22.7	22.7	22.3	22.9	25.9	25.3
- completed general secondary school	7.2	7.8	7.8	6.1	4.9	6.2	6.5	6.4	7.0	8.3	7.4
- completed vocational secondary school	9.5	12.3	15.7	15.3	15.9	16.5	16.2	15.9	15.9	17.6	17.9
Passed skilled workers' examination	36.9	36.9	37.3	37.8	36.2	34.2	35.7	36.0	38.0	36.9	37.7
Completed vocational school for typists and stenographers	2.4	2.5	0.9	1.0	1.0	1.2	1.2	1.2	1.2	1.3	1.4
Completed vocational school for nurses	0.9	1.5	1.1	1.1	1.1	1.2	1.2	1.1	1.2	1.0	1.1
Completed primary school or dropped out from intermediate-level education	26.8	20.4	19.9	21.5	23.6	24.2	23.4	23.9	21.8	20.5	19.5
Did not finish primary school and reached the age of 16	10.2	9.7	5.1	4.9	5.6	4.9	4.7	4.5	4.4	4.1	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1000 people	(193.6)	(155.1)	(126.5)	(123.4)	(126.9)	(126.2)	(128.7)	(134.0)	(137.7)	(140.4)	(137.3)
Qualified	55.9	62.0	67.2	67.5	66.0	64.7	65.3	65.2	66.8	67.0	68.5
Non-qualified	44.1	38.0	32.8	32.5	34.0	35.3	34.7	34.8	33.2	33.0	31.5

Source:

Central Statistical Office

Table No 9. Skills and occupations in vocational training in the state school system in Hungary

	Supervisory central agency													
	Min. of Educ.	Min. of Ind.	Min. of Trans.	Min. of Constr. and Urb.	Min. of Agric. and Food	Min. of Health	Nat. Office of Water Supply	Min. of Int. Comm.	Hung. Post Office	Centr. Stat. Office	Min. of Finance	Nat. Planning Office	Min. of Ext. Trade	Total
1) Complementary training for secondary school-leavers	1	-	-	-	-	-	-	1	-	-	-	-	1	3
2) Vocational secondary schools	30	23	6	5	7	1	3	2	1	3[1)]	2[1)]	1[1)]	1[1)]	78
3) Technical vocational secondary schools (4 + 1 years)	-	5	7	-	-	-	-	-	-	-	-	-	-	12
4) Technical vocational secondary schools skilled worker training (2 + 2 years)	-	26	1	-	1	-	-	-	1	-	-	-	-	29
5) Technical vocational secondary schools technicians' training (2 + 3 years)	-	35	12	6	11	-	4	-	2	-	-	-	-	70
6) Qualifications available only for secondary school-leavers	-	10	-	-	-	1	-	2	-	-	-	-	-	13

Table No 9. continued

7) Qualifications available for sec. school-leavers graduates at skilled workers' school (1, 1,5, 2 years)	-	99	14	29	29	-	2	14	3	-	-	-	-	190
8) Qualifications available only for adults	1	4	2	6	1	-	-	-	-	-	-	-	-	14
9) Vocational schools (2, 3 years)	2	-	-		-	1	-	-	-	-				3
10) Qualifications available at vocational secondary schools by sec. school-leavers (2 years)	-	40	10	5	34	-	-	-	2	-	-	-	-	91
11) Skilled workers' schools (3 years)	-	84	10	29	26	-	2	12	1	-	-	-	-	164
12) Skilled worker qualifications in vocational secondary school (4 years)	-	41	13	5	34	-	-	-	2	-	-	-	-	95

Source:

Ministry of Education

1) Responsibility shared with Ministry of Education

Table No 10.

The contents of skilled worker training in Hungary

Type of school	Training time (hours)			
	General subjects	Specialized theoretical knowledge	Specialized practical	Total
Skilled workers' school (3 years)	894 (24.5%)	822 (22.6%)	1920 (52.9%)	3636 (100.00%)
Vocational secondary school (4 years)	2376 (51.4%)	992 (21.4%)	1252 (27.2%)	4620 (100.00%)

Source:

Ministry of Industry

Table No 11.

Skilled workers's schools: personnel and material conditions

	Number of schools	Number of students	Number of teachers	Number of students per teacher	Number of classrooms	Number of students per classroom	Number of training workshops	Number of workplaces in training workshops	Ratio of students trained in workshops	Number of student residences	Number of students in residences
1970.	214	223238	639	349.4	2515	88.8	111	10939	8.8	236	-
1975.	268	164581	929	177.2	2627	62.6	168	13174	14.1	237	33513
1980.	268	154096	1117	138.0	2823	54.6	208	14200	16.3	226	32582
1981.	264	157387	1132	139.0	2889	54.5	213	14883	17.0	218	32437
1982.	266	168667	1142	147.7	2874	58.7	225	15218	16.2	147	33325
1983.	269	174810	1184	147.6	2909	60.1	233	15176	15.5	144	32749
1984.	270	178044	1247	142.8	2991	59.5	235	15464	14.7	144	32051
1985.	274	176380	1201	146.9	3091	57.1	241	15516	14.6	147	31396

Source:

Central Statistical Office

Table No 12.

Vocational secondary schools: personnel and material conditions

Years	Number of students	Number of teachers	Number of students per teacher	Number of classrooms	Number of students per classroom	Number of students in residences	Students in residences as % of all students
1970.	110303	6246	17.7	2811	39.2	27470	24.9
1975.	107661	7415	14.5	3038	35.4	31397	29.2
1980.	113838	8821	12.9	3463	32.9	35742	31.4
1981.	116238	9078	12.8	3504	33.2	35133	30.2
1982.	120460	9202	13.1	3583	33.6	35679	29.6
1983.	124078	9480	13.1	3541	35.0	35663	28.7
1984.	127808	9757	13.1	3548	36.0	35771	28.0
1985.	130310	9976	13.1	3610	36.1	34942	26.8

Source:

Central Statistical Office

Table No 13. Training courses - successful participants according to branches of economic activity (1986)

	Training courses providing initial training			further training				Total
	for manual jobs	for non-manual jobs	total	for manual jobs	for non-manual jobs	total	number	%
Industry	26925	4565	31490	38867	2631	41498	72988	24.48
Construction	5521	528	6049	10689	274	10963	17012	5.71
Agriculture and forestry	4071	392	4463	4281	549	4830	9293	3.12
Water supply	607	87	694	85	69	154	848	0.28
Land survey	-	156	156	-	191	191	347	0.12
Communication and transport	4306	1163	5469	8764	1174	9938	15407	5.17
Telecommunication	2546	1993	4539	1403	1115	2518	7057	2.37
Commerce and catering	4459	9819	14278	4083	1353	5436	19714	6.60
Intra-organizational transport and packing	17159	-	17159	2660	-	2660	19819	6.65
Accounting	-	11764	11764	-	11427	11427	23191	7.78
Computer technology	532	4202	4734	640	7610	8250	12984	4.35
Law, state administration	1110	8318	9428	18498	7665	26163	35591	11.94
Education, culture	110	4443	4553	150	4759	4909	9462	3.17
Health service	557	3636	4193	855	7554	8409	12602	4.22
Others	502	3806	4308	35088	2455	37543	41851	14.04
Total	68405	54872	123277	126063	48826	174889	298166	100.00

Source:
Central Statistical Office

Table No 14. Training courses - no. of successful participants and organizers (1986)

Organizers	Training courses providing: initial training for manual jobs	initial training for non-manual jobs	initial training total	further training for manual jobs	further training for non-manual jobs	further training total	Total number	Total %
Ministries/central state agencies	-	1149	1149	23	792	815	1964	0.66
Councils (local state administration)	-	29	29	39	134	173	202	0.07
Enterprises, cooperatives	31134	9165	40299	33971	9477	43448	83747	28.09
Training centres	16544	31689	48233	10219	25552	35771	84004	28.17
Institutions of higher education	607	388	995	858	3023	3881	4876	1.64
Institutions of secondary education	14615	7087	21702	4390	4084	8474	30176	10.12
Other institutions of education	-	-	-	-	-	-	-	-
Other organizations	5505	5365	10870	76563	5764	82327	93197	31.25
Total	68405	54872	123277	126063	48826	174889	298166	100.00

Source:

Central Statistical Office

Table No 15. Training courses - no. of successful participants and mode of funding (1986)

	Training courses providing							
	initial training			further training			Total	
	for manual jobs	for non-manual jobs	total	for manual jobs	for non-manual jobs	total	number	%
The employer is the organizer and bears the costs	42401	13753	56154	36645	18207	54852	111006	37.23
The employer bears the costs	13723	15441	29164	14501	20505	35006	64170	21.52
The employer and the student (employee) share the costs	9252	18926	28178	1877	4821	6698	34876	11.70
The student bears the costs	2766	6042	8808	66368	2004	68372	77180	25.88
Training course free of charge	153	710	863	6655	3273	9928	10791	3.62
Unknown	110	-	110	17	16	33	143	0.05
Total	68405	54872	123277	126063	48826	174889	298166	100.00

Source:

Central Statistical Office

Table No 16. Jobs offered to those leaving various types of school

(Number of jobs per 100 school leavers)

Those leaving	1983.	1984.	1985.	1986.	1987.
Primary schools	159	146	117	118	104
General secondary schools	68	59	46	45	40
Vocational secondary schools (final secondary school certificate)	108	96	80	77	64
Vocational secondary school (skilled workers' certificate)	143	131	92	74	58
Skilled workers' schools	141	139	120	124	104
Vocational schools	95	86	83	70	63
Total	129	124	103	101	90

Source:

Labour Information Centre (MIK)

CEDEFOP — European Centre for the Development of Vocational Training

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